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OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER 222
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

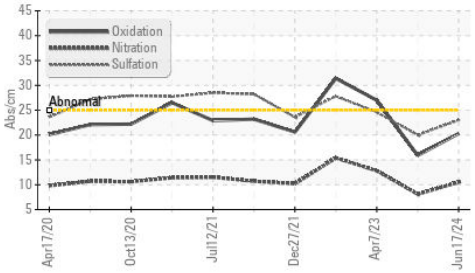
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LW0009413	LW0008984	LW0006890
Sample Date		Client Info		17 Jun 2024	08 Mar 2024	07 Apr 2023
Machine Age	mls	Client Info		798000	798000	798000
Oil Age	mls	Client Info		50000	50000	582900
Filter Age	mls	Client Info		25000	25000	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>80	53	30	64
Chromium	ppm	ASTM D5185m	>5	3	1	5
Nickel	ppm	ASTM D5185m	>2	0	0	1
Titanium	ppm	ASTM D5185m		<1	2	1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	28	13	▲ 77
Lead	ppm	ASTM D5185m	>30	0	0	<1
Copper	ppm	ASTM D5185m	>150	7	7	7
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	9	6	11
Potassium	ppm	ASTM D5185m	>20	39	16	25
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.6	0.2
Nitration	Abs/cm	*ASTM D7624	>20	10.5	8.1	12.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.0	20.0	24.6
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		2	2	3
Boron	ppm	ASTM D5185m	2	<1	3	2
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	66	61	65
Manganese	ppm	ASTM D5185m	0	<1	0	1
Magnesium	ppm	ASTM D5185m	950	1100	1003	1056
Calcium	ppm	ASTM D5185m	1050	1242	1141	1251
Phosphorus	ppm	ASTM D5185m	995	1167	1137	1091
Zinc	ppm	ASTM D5185m	1180	1484	1312	1393
Sulfur	ppm	ASTM D5185m	2600	3322	3303	2640
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.3	15.9	27.0
Base Number (BN)	mg KOH/g	ASTM D2896		6.7	8.4	4.3
Visc @ 100°C	cSt	ASTM D445	12.00	12.1	11.9	12.1

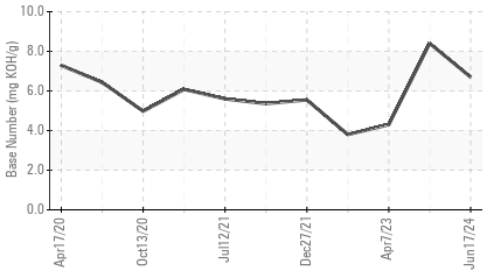
Report Id: LIVBRI [WUSCAR] 06217911 (Generated: 06/25/2024 04:45:35) Rev: 1

Submitted By: GREG SMIALKOWSKI

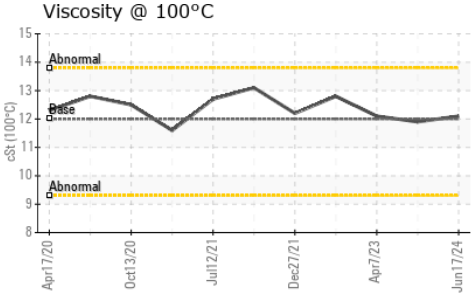
FT-IR (Direct Trend)



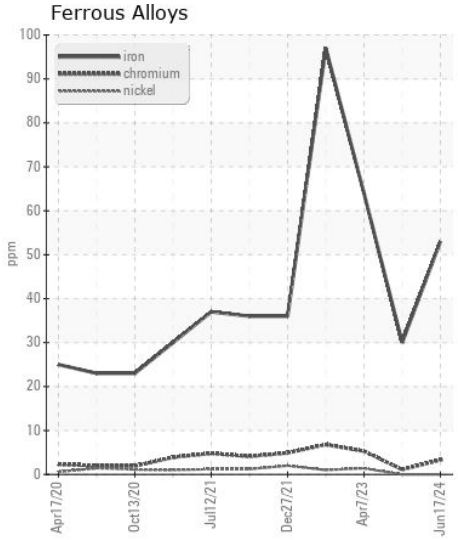
Base Number



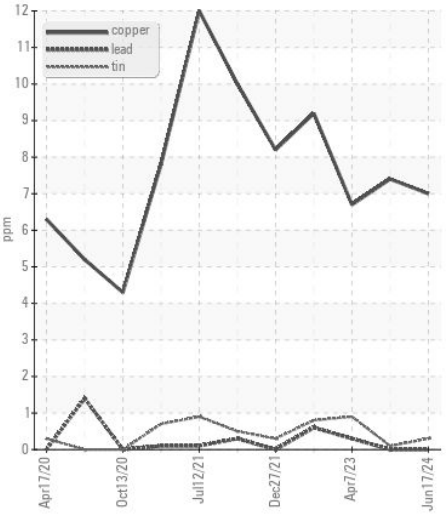
Viscosity @ 100°C



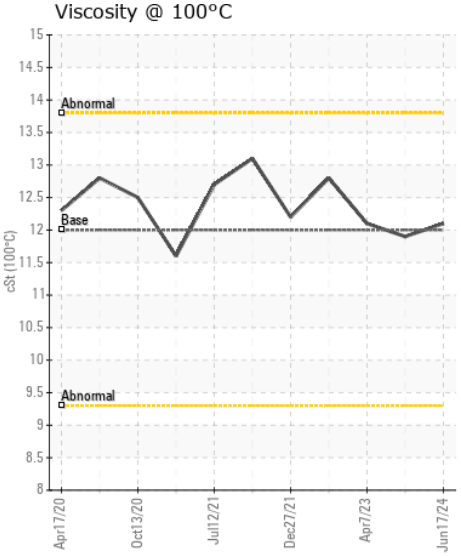
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LW0009413
Lab Number : 06217911
Unique Number : 11096108
Test Package : FLEET

Received : 24 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 25 Jun 2024 - Wes Davis

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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